IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A modified enzyme wherein at least one neutral amino acid of the wildtype enzyme is replaced with at least one acidic amino acid in the coenzyme binding site, and wherein the basic amino acids at the coenzyme binding site of said enzyme are not replaced; wherein the modified enzyme exhibits increased NAD(H) affinity compared to ~~an~~ the wildtype enzyme.

2. (Original) The modified enzyme of claim 1, which is a dehydrogenase enzyme.

3. (Original) The modified enzyme of claim 2, which is an alcohol dehydrogenase enzyme.

4. (Original) The modified enzyme of Claim 2, which is a rec-(R)-alcohol dehydrogenase enzyme.

5. (Original) The modified enzyme of claim 4, which is a *L. brevis* or *L. kefir* rec-(R)-alcohol dehydrogenase enzyme.

6. (Original) The modified enzyme of claim 1, which comprises the amino acid sequence of SEQ ID NO:2.

7. (Currently Amended) The modified enzyme of claim ~~5~~ 6, which is a *L. brevis* rec-(R)-alcohol dehydrogenase and which comprises a Glycine to Aspartic Acid amino acid change at amino acid 38.

8. (Original) An isolated polynucleotide which encodes the modified enzyme of claim 1.

9. (Original) The isolated polynucleotide of claim 8, which comprises the nucleotide sequence of SEQ ID NO:1.

10. (Original) A plasmid vector comprising the isolated polynucleotide of claim 8.

11. (Original) A host cell comprising the isolated polynucleotide of claim 8.

12. (Currently Amended) A method of ~~modifying an enzyme~~ making the modified enzyme of Claim 1 comprising: replacing at least one neutral amino acid in ~~said~~ a wildtype enzyme with at least one acidic amino acid in the coenzyme binding site of the enzyme, wherein the basic amino acids at the coenzyme binding site of said enzyme are not replaced; and wherein said modified enzyme exhibits increased NAD(H) affinity compared to an unmodified the wildtype enzyme.

13. (Original) The method of claim 12, wherein said enzyme is a dehydrogenase enzyme.

14. (Original) The method of claim 13, wherein said enzyme is an alcohol dehydrogenase enzyme.

15. (Original) The method of Claim 13, wherein said enzyme is a rec-(R)-alcohol dehydrogenase enzyme.

16. (Original) The method of claim 15, wherein said enzyme is a *L. brevis* or *L. kefir* rec-(R)-alcohol dehydrogenase enzyme.

17. (Original) The method of claim 12, wherein said enzyme comprises the amino acid sequence of SEQ ID NO:2.

18. (Currently Amended) The method of claim ~~12~~ 17, which is a *L. brevis* rec-(R)-alcohol dehydrogenase and which comprises a Glycine to Aspartic Acid amino acid change at amino acid 38.

19. (Original)A method of making the modified enzyme which has improved NAD(H) affinity comprising culturing the cell of claim 8 for a time and under conditions suitable for the expression of the polynucleotide which encodes said enzyme; and collecting the enzyme.

20. (Original) The isolated nucleotide sequences of SEQ ID NO:4 and SEQ ID NO:5.

21. (Original) Sense and antisense polynucleotides which encode TDRHSDVG.

22. (Original) A method of enantioselective reduction of a organic compound comprising reacting said compound with the enzyme of claim 1 and at least one of NAD(H) and NAD+, wherein said organic compound is selected from the group selected from the group consisting of ketones, α-keto esters, β-keto esters, γ-keto esters, and combinations thereof.

23. (Original) The method of claim 22, which yields a chiral alcohol.

24. (Original) The method of claim 23, wherein said chiral alcohol is an (R)-alcohol.

25. (Original) The method of claim 22, wherein said reacting is with NAD(H).

26. (Original) The method of claim 22, wherein said enzyme is a dehydrogenase enzyme.

27. (Original) The method of claim 22, wherein said enzyme an alcohol dehydrogenase enzyme.

28. (Original) The method of claim 22, wherein said enzyme is a rec-(R)-alcohol dehydrogenase enzyme.

29. (Original) The method of claim 22, wherein said enzyme is a *L. brevis* or *L. kefir* rec-(R)-alcohol dehydrogenase enzyme.

30. (Original) The method of claim 22, wherein said enzyme comprises the amino acid sequence of SEQ ID NO:2.

31. (Original) The method of claim 22, wherein said enzyme is a *L. brevis* rec-(R)-alcohol dehydrogenase and which comprises a Glycine to Aspartic Acid amino acid change at amino acid 38.

32. (Original) A method of enantioselective oxidation of alcohols comprising reacting an alcohol comprising reacting a alcohol with the enzyme of claim 1 and at least one of NAD(H) and NAD+.

33. (Original) The method of claim 32, which yields a chiral alcohol.

34. (Original) The method of claim 33, wherein said chiral alcohol is a (R)-alcohol.

35. (Original) The method of claim 32, wherein said reacting is with NAD(H).

36. (Original) The method of claim 32, wherein said enzyme is a dehydrogenase enzyme.

37. (Original) The method of claim 32, wherein said enzyme an alcohol dehydrogenase enzyme.

38. (Original) The method of claim 32, wherein said enzyme is a rec-(R)-alcohol dehydrogenase enzyme.

39. (Original) The method of claim 32, wherein said enzyme is a *L. brevis* or *L. kefir* rec-(R)-alcohol dehydrogenase enzyme.

40. (Original) The method of claim 32, wherein said enzyme comprises the amino acid sequence of SEQ ID NO:2.

41. (Original) The method of claim 32, wherein said enzyme is a *L. brevis* rec-(R)-alcohol dehydrogenase and which comprises a Glycine to Aspartic Acid amino acid change at amino acid 38.